



GLOBAL
SOIL BIODIVERSITY
INITIATIVE

Global Soil Biodiversity Initiative
Secretariat Office
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Colorado State University
108 Johnson Hall
Fort Collins, CO 80523-1036
USA

Date: 15 November 2021

To: Elizabeth Maruma Mrema, Executive Secretary
United Nations Convention on Biological Diversity

Dear Executive Secretary Mrema,

On behalf of the Global Soil Biodiversity Initiative (GSBI), a volunteer scientific network of more than 4000 members exploring the vulnerability of belowground biodiversity and its regulation of ecosystem processes, we are pleased to present The GSBI Scientific Advisory Committee position on assuring that scientific knowledge of soil biodiversity is acknowledged in the development of global environmental policies and the need for governments to commit to the principles we outline.

Please see the attached document.

Thank you and best wishes,

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Protecting, Restoring and Promoting Soil Biodiversity!

We find ourselves at a crossroads. Unsustainable land use practices and human-induced climate change are causing widespread environmental degradation, resulting in loss of biodiversity and ecosystem functions at rates previously unknown in human history. Of critical importance is the biodiversity under our feet, soil biodiversity, which is estimated to make up at least one quarter of the microbial and animal biodiversity on earth. Soil biodiversity includes all organisms that spend some part of their life cycle using soil as a habitat. This includes, but isn't limited to, a vast diversity of microbes, insects and other invertebrates, plant roots, and even some vertebrates. Soil biota regulate fundamental processes important to life on earth, such as nutrient cycling, carbon storage, water filtration, and pest control, among many others.

Soil biodiversity is critical to aboveground biodiversity and ecosystem services.

Adherence to sound science-based expertise in developing policies and policy assessments is vital to protecting the ecosystem services provided by soil biodiversity. We know for sure that if we keep losing soil biodiversity at the current rate, this will have catastrophic consequences for our land, food production and wider environmental quality, posing a major threat to the sustainability of human life on earth. At this critical time in the history of the earth, we at the **Global Soil Biodiversity Initiative** call on The UN Convention on Biological Diversity to commit to the following principles:

- **Protection, restoration and promotion of soil biodiversity should be a priority of all Governments.** Governments should commit to the judicious use of soil to protect, restore and promote all soil biodiversity by developing policies and legal mechanisms, based on science-based expert knowledge, including indigenous knowledge
- **Soil biodiversity science must be a key factor in the establishment of biodiversity targets.** Knowledge of the importance of the vast diversity of fauna and flora that inhabit soil and sustain all life aboveground should be recognized and included in global policies for the protection, restoration, and promotion of biodiversity
- **Education and awareness of soil biodiversity is critical to take necessary actions.** Outreach in multiple forms on the importance of protecting, restoring, and promoting soil biodiversity is central for stakeholder support of policies and legal mechanisms as well as individual actions.

Life in soil can no longer be considered unknown, unimportant, and disposable. If soil biodiversity is threatened, life on earth is threatened. It is imperative that we acknowledge and sustainably manage our soil resources now. This requires urgent regulation of soil use and the introduction of penalties for polluting or damaging soils. Protecting and restoring our soil resources through outreach programs that encourage sustainable land use practices and discourage soil degradation is also required. Soil life is the resource that leads to all other resources. Human-induced climate change and unsustainable land use practices, such as intensive agriculture and excessive urbanization, threaten these resources.

Please join us in recognizing that protecting, restoring and promoting soil biodiversity is crucial to reaching the sustainable development goals, and that this is the pathway forward to securing our future and the future of generations to come.